

## CLAIMS LISTING

The following listing supercedes all previous listings.  
Independent claims 1 and 8 are amended hereby.

1. (Currently Amended) An x-ray examination apparatus  
comprising

an x-ray image sensor matrix for deriving a  
calibrated~~an initial~~ image signal from a predetermined  
calibrated x-ray exposure, which calibrated image signal  
represents delayed electric charges emitted during read-out  
after a fixed period of time since said predetermined  
calibrated x-ray exposure, and an initial image signal from an  
x-ray image, and

a correction unit for deriving a corrected image signal  
from the initial image signal, wherein the correction unit  
includes a memory for storing correction values derived from  
the calibration image signal and an arithmetic unit for  
computing signal levels of the corrected image signal from  
signal levels of the initial image signal and at least some of  
said correction values in order to take said delayed electric  
charges into consideration during correction.

2. (Previously Amended) An x-ray examination apparatus as  
claimed in Claim 1, wherein the correction unit includes a

selection unit for selecting correction values from the memory on the basis of exposure parameters.

4. (Previously Amended) An x-ray examination apparatus as claimed in Claim 1, wherein the arithmetic unit is arranged to compute accurate correction values, from the stored correction values derived from the calibration image signal, and to compute signal levels of the corrected image signal from signal levels of the initial image signal and said accurate correction values.

5. (Previously Amended) An x-ray examination apparatus as claimed in Claim 4, wherein the arithmetic unit is arranged to interpolate said computed correction values between stored correction values.

6. (Original) The x-ray examination apparatus as claimed in claim 1, wherein the arithmetic unit is arranged to compute accurate correction values from stored correction values, and to compute signal levels of the corrected image signal from signal levels of the initial image signal and said accurate correction values.

7. (Original) The x-ray examination apparatus as claimed in claim 6, wherein the arithmetic unit is arranged to

interpolate said computed correction values between stored correction values.

8. (Currently Amended) A method for performing an x-ray examination utilizing an x-ray examination apparatus having an x-ray image sensor matrix and an x-ray image correction unit with a memory and arithmetic correction unit wherein a resulting corrected image signal presented for viewing is substantially free of after images from previously generated x-ray image signals, the method comprising the steps of:

deriving a calibrated image signal by irradiating the image sensor matrix with a predetermined calibrated x-ray exposure, which calibrated image signal represents delayed electric charges emitted during read-out after a fixed period of time since said predetermined calibrated x-ray exposure;

generating correction values from the calibrated image signal;

storing the correction values in a memory;

radiating an object for examination and deriving an instant image signal from the image sensor matrix pursuant to said radiating; and

correcting the instant image signal to form the corrected image signal by processing the instant image signal in the x-ray image correction unit in accordance with at least one of said memory-stored correction values in order to take

said delayed electric charges into consideration during  
correction.